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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,331	01/25/2001	Takashi Suzuki	862.C2097	3930

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EXAMINER

PHAM, THIERRY L

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,331

Applicant(s)

SUZUKI ET AL.

Examiner

Thierry L. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

- This action is responsive to the following communication: RCE filed on 8/16/05.
- Claims 41-56 are pending; claims 1-40 have been canceled.

Response to Arguments

Applicant's arguments, see pages 7-8, filed 8/16/05, with respect to the rejection(s) of claim(s) 41 and 48 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art reference due to newly added features as cited in claims 41 & 48 ("dividing means for dividing the image into a plurality of blocks based upon a size of characteristic portion of a copy-prohibited image for testing").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 41-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh et al (US 5845008), and in view of Gustafson et al (US 6442284).

Regarding claim 41, Katoh discloses an apparatus (image processing device for copy machine, fig. 1, col. 11, lines 25-26) for processing image data to prevent the output of copy-prohibited image data (prevent copy-prohibited image from reproducing, col. 3, lines 40-52), said apparatus comprising:

- means for transferring (transferring image data in packets from PC to image forming apparatus is widely known and available in the art, for example, transferring via network such as LAN) image data defining an image in packets such that each packets contains image data for a tile of the image, wherein the image is made up of a plurality of tiles in the length and width directions;

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- determination means (pattern detecting devices 1-3 for detecting and determining whether the document contains any confidential patterns, fig. 1, col. 5, lines 40-44) for testing the image data defining the image to determine whether the image data has characteristics of a copy-prohibited image (i.e. banknotes, abstract and col. 7, lines 21-28);
- dividing means (dividing into blocks, i.e. area 45 and 46 as shown in fig. 24, col. 21, lines 9-16) for dividing the image into a plurality of blocks (i.e. four blocks, fig. 36 & 38) for testing by said determination means, such that each block includes image data for an integer number of tiles (i.e. plurality of cells, fig. 13, col. 17, lines 31-55 and col. 21, lines 9-17); and
- control means (CPU 30, fig. 7, col. 19, lines 20-32) for generating a control signal to prevent (prohibit copy command will be issued, and the confidential items will not be copied, col. 5, lines 29-31) the output of image data for faithfully reproducing the image, in response to detection of image data having characteristics of a copy-prohibited image (document contains security mark 6, fig. 36) by said determination means, wherein said determination means is arranged to test the blocks generated by said dividing means to determine whether a block has characteristics of a copy-prohibited image.

Katoh teaches a dividing means for dividing image data into plurality of blocks, but fails to teach and/or suggest a dividing means for dividing image data into plurality of blocks based upon a size of characteristics portion of a copy-prohibited image (col. 3, lines 18-25 and col. 4, lines 15-25).

Gustafson, in the same field of endeavor for preventing confidential marks for copying, teaches a dividing means for dividing image data into plurality of blocks based upon a size of characteristics portion of a copy-prohibited image.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify an image processing apparatus of Katoh to include a dividing means for dividing image data into plurality of blocks based upon a size of characteristics portion of a copy-prohibited image as taught by Gustafson because of a following reason: (•) to detect watermark more accurately (abstract of Gustafson) and to accurately preventing confidential documents from being copied.

Therefore, it would have been obvious to combine Katoh with Gustafson to obtain the invention as specified in claim 41.

Regarding claim 42, Katoh further discloses an apparatus according to claim 41, wherein said apparatus further comprises image processing means (i.e. color processing circuit 56, fig. 27, col. 22, lines 4-16) responsive to the control signal to execute predetermined processing (i.e. making the entire screen go black and or signal prohibiting copy of confidential marks, col. 22, lines 4-16) of the image data determined by said determination means to have characteristics of a copy-prohibited image, wherein said control means is operable to generate the control signal to control said image processing means.

Regarding claim 43, Katoh further discloses an apparatus according to claim 42, wherein said image processing means is responsive to the control signal to change the density or brightness of the image data (varying confidential marks density and/or resolution, fig. 21, col. 20, lines 30-46).

Regarding claim 44, Katoh further discloses an apparatus according to claim 42, wherein said image processing means is responsive to the control signal to erase (col. 15, lines 25-28) the image data.

Regarding claim 45, Katoh further disclose an apparatus according to claim 41, wherein said determination means is operable to test the image data of a block (i.e. plurality of blocks figs. 36 & 38) to determine whether the image data has characteristics of a copy-prohibited image by testing the image data to determine whether it contains a digital watermark (watermark 6, fig. 36).

Regarding claim 46, Katoh further discloses an apparatus according to claim 41, wherein said apparatus further comprises thinning means for thinning the image data defining the image to generate a low-resolution image (reduce resolution, col. 4, lines 18-24 and col. 4, lines 60-67), and said dividing means is arranged to divide the low-resolution image to generate the plurality of blocks (partition into plurality of cells, col. 6, lines 20-25).

Regarding claim 47, Katoh further discloses an apparatus according to claim 46, wherein said determination means comprises means to test the blocks of low-resolution data to detect the position (position detecting unit 25 for detecting position coordinates of pattern detected, fig. 9, col. 7, lines 30-35 and col. 15, lines 55-56) of image data potentially having characteristics of a copy-prohibited image; extract (extract via extracting device 2, fig. 1) at least one block of original-resolution image data on the basis of the detected position, and test (test whether the documents contain any confidential marks, col. 8, lines 38-45) the extracted at least one block of original-resolution image data to determine whether the at least one block has characteristics of a copy-prohibited image.

Regarding claims 48-54: Claims 48-54 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 41-47; therefore, claims 48-54 are rejected for the same rejection rationale/basis as described in claims 41-47 above.

Regarding claims 55-56: Claims 55-56 recite limitations that are similar and in the same scope of invention as to those in claims 48 except computer readable memory for storing computer programs. All computers/printers have some type of computer readable medium (i.e. memory 20, fig. 7 of Katoh) for storing computer programs, hence claims 55-56 would be rejected using the same rationale as in claims 48.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US 6665082 to Takeoka et al, teaches an example of transferring image data in packets via a network.

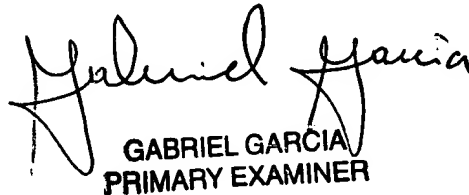
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham



GABRIEL GARCIA
PRIMARY EXAMINER